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*United States Attorney  
Southern District of New York*

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April 25, 2023

**VIA ECF**

Hon. Jesse M. Furman  
United States District Judge  
Southern District of New York  
40 Foley Square  
New York, New York 10007

**Re: *United States v. Nathaniel Chastain*, 22 Cr. 305 (JMF)**

Judge Furman:

The night before trial, the defense produced nine charts that Professor Skinner intends to introduce, as part of showing that the revelation of the defendant's misconduct did not harm OpenSea. Those charts show that Professor Skinner did not reliably apply economic principles to his analysis and, indeed, performed no economic analysis at all. The charts also show that the defense intends to turn Professor Skinner's testimony into a lengthy sideshow about actual harm to OpenSea, which is not an element of the offense. Accordingly, the Government moves to preclude Professor Skinner from testifying about the nine new charts and their supporting documents.

**I. Background**

As the Court is aware, the Government intends to offer expert testimony of Professor Daniel Taylor, from the Wharton School. Professor Taylor plans to testify about economic literature about the importance of trust in functioning markets. He will opine that, in light of this economic literature, companies that run marketplaces—such as OpenSea—have an economic incentive to control the use of corporate information that could be misused to gain an advantage in their marketplaces. His testimony is, in short, about incentives: because trust is important for marketplaces, companies that run marketplaces have an economic incentive to control information that could undermine trust.

Professor Taylor does not plan to opine that the revelation of the defendant's misconduct resulted in actual harm to OpenSea, in the form of lower transactions, lost revenue, or lost users. In his expert disclosure, Professor Taylor noted that the "public reaction to the discovery of Chastain's" misconduct was "consistent with an erosion of trust in the marketplace," which Professor Taylor took to corroborate his view that OpenSea had an economic incentive to protect trust. But Professor Taylor never intended to offer an opinion on actual harm to OpenSea and, in light of the Court's decision on the *Daubert* motions in this case, does not intend to offer an opinion about whether or not the public reaction to the defendants' conduct was consistent with an erosion of trust.

The defense expert, Professor Douglas Skinner, had one sentence in his expert report that addressed erosion of trust. He wrote:

Based on data and analysis of the activity on and involving OpenSea in the period following the public revelation of the news of Mr. Chastain's conduct, I expect to opine that, while Prof. Taylor postulates that "erosion of trust" could theoretically have an adverse effect on OpenSea's business model, I have seen no reliable empirical evidence that OpenSea suffered harm from the alleged conduct, including through any purported "erosion of trust."

Skinner Notice at 4. In a single footnote, Professor Skinner cited Google Trends, a website called Dune.com, and a website called Semrush.com. He also cited several articles regarding OpenSea's fundraising in January 2022, months after the conduct in this case. *Id.* Professor Skinner did not include any data or charts in his disclosure.

On April 23, 2023, the defense disclosed, for the first time, nine charts that the defense intends to offer through Professor Skinner, along with supporting documents for those charts. Four of the charts show data on the number and value of transactions on OpenSea before and after the revelation of Chastain's misconduct, as well as the number of buyers and sellers on the platform during that period. DX65-68. Four of the charts show Google searches for OpenSea and web traffic to the site before and after the revelation of Chastain's misconduct. DX70-73. And one of the charts shows data on OpenSea's fundraising and valuations before and after the revelation of the defendant's misconduct. DX74.

None of the charts appear to reflect any attempt to isolate the effect of the disclosure of the defendant's misconduct from any other variable, including but not limited to OpenSea's response to the defendant's misconduct, other OpenSea announcements or actions, or general trends in the NFT space.

## **II. Argument**

This Court should preclude Professor Skinner from offering the nine charts described above, as well as their supporting documents. The charts amount to junk science: they are a vehicle for Professor Skinner to eyeball the data and claim the defendant's conduct had no effect on OpenSea, without performing any analyses necessary for a reliable conclusion. They are also a clear effort to inundate the jury with arguments that OpenSea was not harmed by the defendant's misconduct, rather than a genuine attempt to engage with Professor Taylor's opinions.

### **A. Professor Skinner's Charts Are Not Reliable.**

Professor Skinner's proposed charts, which were not produced to the Government until the day before trial, appear to be Professor Skinner's foundation for claiming that OpenSea was not harmed by the revelation of the defendant's misconduct. The charts reveal that Professor Taylor has not taken *any* steps to isolate the effect of that revelation from a litany of other variables that affect OpenSea's traffic and value. Because he has not even attempted to do the bare minimum required of an expert, he should not be permitted to testify regarding the proposed charts.

Rule 702 requires that expert testimony “is the product of reliable principles and methods” that are “reliably applied . . . to the facts of the case.” It is axiomatic that Courts should not “admit opinion evidence that is connected to [the facts] only by the *ipse dixit* of the expert.” *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997).

There is a well-developed body of case law applying this legal principle to economic experts who purport to analyze the effect of a particular variable (such as an event) on another variable (like a stock price or a company’s earnings). “To be reliable, a data analysis must account for major variables, including major confounding variables.” *Lamarr-Arruz v. CVS Pharmacy, Inc.*, 15 cv. 4261 (JGK), 2017 WL 4277188, at \*10 (S.D.N.Y. Sept. 26, 2017); *accord Reed Constr. Data v. McGraw-Hill Co.*, 49 F. Supp. 3d 385, 400 (S.D.N.Y. 2014) (holding that data analyses “must control for the ‘major factors’ that might influence the dependent variable”). In *Bickerstaff v. Vassar College*, for example, the Second Circuit upheld a decision excluding an expert who purported to analyze the connection between race and salaries at a college, but had failed to account for important variables, such as “teaching evaluations and duration of service.” 196 F.3d 435, 448-49 (2d Cir. 1999); *see also Wills v. Merada Hess Corp.*, 379 F.3d 32, 50, (2d Cir. 2004) (excluding expert testimony that failed to account for major variables). Lower courts have drawn from this decision, and others like it, the principle that reliable data analyses must account for potential major, confounding variables. *See Lamarr-Arruz*, 2017 WL 4277188, at \*10; *Reed Constr.*, 49 F. Supp. 3d at 400.

Not only has Professor Skinner failed to adequately account for major variables, he has not even attempted to account for variables at all. As the Government previewed in its original *Daubert* motion, determining whether the defendant’s misconduct harmed OpenSea is a difficult endeavor. Among other things, the company took prompt and significant actions to restore trust, including by publicizing that it had asked for the defendant’s resignation, publicizing that it hired a third-party to investigate the issue, and publicizing policies related to employee information use. The NFT market, in general, was also highly volatile over the course of 2021, including during the time period around the revelation of the defendant’s misconduct.

Professor Skinner’s charts confirm, however, that he has not even attempted to take into account these variables or others. Instead, he appears prepared to essentially eyeball raw data mapped out onto a graph and claim that he sees no evidence of the defendant’s misconduct harming OpenSea, despite having taken *no* steps to actually analyze the issue.

Start with the DX65 through 68, which appear to reflect data showing daily transaction volume and user participation on OpenSea between June 2021 and January 2022. The sum total of Professor Skinner’s analysis is drawing a dotted line on the charts that shows when the defendant’s misconduct was exposed. Yet he appears poised to use this chart to testify that, in his expert opinion, the revelation of the defendant’s misconduct did not cause OpenSea to lose users or transactions. That is exactly the type of testimony that Rule 702 is designed to keep out. Professor Skinner has not applied any type of economic analysis to the chart. He has not tried to control for any relevant variables. He should not be allowed to give the imprimatur of expert testimony to his casual review of the data without having reliably applied any economic principles.

DX70 to 73 suffer from the same basic flaw. In these charts, Professor Skinner plots out the Google searches for OpenSea, and the number of visitors to OpenSea, over multiple time

periods. Yet again, his value added to the process consists of drawing a dotted line for when the defendant's misconduct was exposed. As with the prior charts, he has not performed any economic analysis: no regression, no attempt to control for variables, nothing beyond what any non-expert could do, so long as they know how to download Google Trends and web-traffic data.

Professor Skinner's final chart, DX74, is the worst of all. There, Professor Skinner charts OpenSea's fundraising numbers from 2019 through 2022. The effect is to show that, in July 2021 (before the misconduct) OpenSea raised funds at a valuation of \$1.5 billion, whereas in January 2022 (after the misconduct) OpenSea raised funds at a valuation of \$13.3 billion. The impression Professor Skinner seems to be trying to create is that the defendant's misconduct had no effect on OpenSea's fundraising. But it is not at all clear why a single instance of misconduct by an employee the company promptly fired would be expected to effect fundraising months later. And Professor Skinner has not done any analysis of the factors that went into OpenSea's fundraising and valuation figures. He has not analyzed OpenSea's investor pitches. He has not analyzed what investors reviewed in due diligence. He has not seen records on how the parties involved arrived at the fundraising totals or valuations at issue. Instead, he simply took numbers from public sources and lined them up on a graph. That is not expert testimony.

In short, the disclosure of Professor Skinner's proposed slides reveals that he has not attempted to apply economic principles reliably to this case. He has not even attempted to undertake any of the analyses that courts routinely require when experts attempt to analyze the effect of one variable (here, the revelation of the defendant's misconduct) on another variable (here, OpenSea's transactions, traffic, and valuations). This Court should not allow Professor Skinner to give the aura of his expertise to these proposed exhibits, without having done any of the requisite work.

#### **B. The Charts are an Impermissible Attempt to Litigate Ultimate Harm to OpenSea.**

In addition to being inadmissible under Rule 702, Professor Skinner's proposed charts should also be excluded under Rule 403 because they will confuse, distract, and mislead the jury. At bottom, the proposed charts are an effort to place before the jury extensive evidence on the issue of ultimate harm, even though the jury is not required to find ultimate harm to convict. Given the number of charts, no curative instruction could reasonably guard against the substantial risk that the jury will be misled to believe that, if there was no harm to OpenSea, there was no crime.

The jury does not need to find that the defendant's misconduct "actually harmed" OpenSea to find him guilty of wire fraud. *United States v. Jabar*, 19 F.4th 66, 81 (2d Cir. 2021). Accordingly, this Court's *Daubert* decision identified two limited circumstances under which Professor Skinner may testify about the effect of the defendant's misconduct on OpenSea. The first is to rebut testimony from Professor Taylor about the effects of the defendant's misconduct, to the extent the Government elicits such testimony. (Dkt. 88, at 17.) The second is to rebut Professor Taylor's opinion that the literature on trust applies to OpenSea. (Dkt. 88, at 17 n.4.)

The Government does not expect the first circumstance to arise, as it does not intend to elicit testimony from Professor Taylor about the effect of the defendant's misconduct on OpenSea. As for the second circumstance, Professor Skinner's proposed charts go far beyond addressing whether the economic literature on trust applies to OpenSea, and instead are a vehicle for a detour

into extensive testimony about a lack of ultimate harm to the company that will confuse and mislead the jurors.

Because Professor Skinner has been presented as a rebuttal witness, keeping the nature of Professor Taylor's testimony in mind is important. Professor Taylor plans to opine that, according to the economic literature about trust, OpenSea has an interest in taking steps to protect trust in its marketplace—including by controlling information that, if misused, could undermine trust. This is, fundamentally, about OpenSea's economic incentives. Professor Taylor is not opining that a single instance of misuse of company information would undermine and harm the marketplace, particularly if appropriately addressed by the company.

Professor Skinner's proposed charts are not geared to respond meaningfully to Professor Taylor's analysis of OpenSea's economic incentives. The charts are, instead, clearly designed to give Professor Skinner an opportunity for a lengthy digression about actual harm to OpenSea. As explained above, the charts simply plot various data about OpenSea's transactions, traffic, and fundraising, with a dotted line to show when the defendant's misconduct was revealed. The takeaway from each appears to be that, because transactions, traffic, and valuations did not fall, the defendant's misconduct did not harm OpenSea. For the reasons given above, that impression would be misleading because Professor Skinner has done no work to actually isolate the effect of the defendant's misconduct from other variables. But even setting that aside, the charts do not engage with Professor Taylor's fundamental point, which is that OpenSea had an economic incentive to protect trust in its marketplace, not that the particular abuse of trust in this case irrevocably undermined the company.

By making the same point about no ultimate harm in chart after chart, there is a substantial risk that Professor Skinner will leave the jurors with the impression that harm to OpenSea is a critical issue in this case. And while this Court may give a curative instruction on the issue of ultimate harm, the Government is concerned that, at a certain point, the sheer volume of evidence on the issue effectively becomes an appeal for the jury to ignore the law and decide the case based on whether or not OpenSea actually suffered.

**C. A *Daubert* Hearing Is Required Before Allowing Professor Skinner to Offer the Proposed Charts.**

This Court has a sufficient record to preclude Professor Skinner from testifying about his new charts. It is plain, on their face, that they are not the product of reliably applying economic principles and will confuse the jury about the pertinent issues in the case. If, however, the Court is not inclined to preclude the charts, the Government respectfully requests an opportunity to examine Professor Skinner outside the presence of the jury, to identify the nature of his proposed testimony about the charts and determine whether that testimony is the product of reliably applying economic principles.

Respectfully submitted,

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cc: All counsel (*by ECF*)